Health and Health-Related Behaviours Among Young People in the Northwest Territories

Prepared by John Freeman, Matthew King,
Pamela Briand, and Will Pickett
of Queen's University

November 2012

Table of Contents

Executive Summary 5

Introduction 7

TABLE 1: Distribution of Respondents by Gender and Grade 8

Mental Health 9

FIGURE 1: Students in group with highest score on emotional well-being scale, by grade and gender (37% of all students are in this group) 9

FIGURE 2: Students in group with highest score on emotional problems scale, by grade and gender (34% of all students are in this group) 10

FIGURE 3: Students in group with highest score on prosocial behaviours scale, by grade and gender (32% of all students are in this group) 10

FIGURE 4: Students in group with highest score on behavioural problems scale, by grade and gender (36% of all students are in this group) 11

FIGURE 5: Students who responded 8 to 10 on a 0=worst possible to 10=best possible life satisfaction scale, by grade and gender (%) 11

Environmental Influences 12

Neighbourhood and Parents 12

FIGURE 6: Students that either agree or strongly agree that "it is safe for younger children to play outside during the day," by grade and gender (%) 12

FIGURE 7: Students that either agree or strongly agree that "you can trust people around here," by grade and gender (%) 13

FIGURE 8: Students that either agree or strongly agree that "there are good places to spend your free time (e.g., recreation centres, parks, shopping centres) where you live," by grade and gender (%) 13

FIGURE 9: Students who agree or strongly agree with the statement "My parents understand me," by grade and gender (%) 14

FIGURE 10: Students who agree or strongly agree with the statement "My parents expect too much of me," by grade and gender (%) 14

Friends 15

FIGURE 11: Students who find it easy or very easy to talk to same-sex friends about things that really bother them, by age and gender (%) 15

FIGURE 12: Students who find it easy or very easy to talk to opposite- sex friends about things that really bother them, by age and gender (%) 15

School Setting 16

FIGURE 13: Students who agree or strongly agree with the statement "I feel I belong at this school," by grade and gender (%) 16

FIGURE 14: Students who agree or strongly agree with the statement "The rules in this school are fair," by grade and gender (%) 16

FIGURE 15: Students who agree or strongly agree with the statement "Other students accept me as I am," by grade and gender (%) 17

Health Promoting Behaviours 18

Healthy Eating 18

TABLE 2: Students eating food items or drinking beverages once per day or more often, by grade and gender (%) 18

FIGURE 16: Students who have dieted or changed eating habits to lose weight in the past 12 months, by grade and gender (%) 19

FIGURE 17: Students classified as overweight or obese on the Body Mass Index (BMI), by grade and gender (%) 20

FIGURE 18: Students who report they go to school or to bed hungry because there is not enough food at home at least sometimes, by grade and gender (%) 20

Physical Activity 21

FIGURE 19: Students physically active every day over the past seven days for a total of at least 60 minutes per day, by grade and gender (%) 21

FIGURE 20: Students spending four or more hours per week doing physical activity in class time at school, by grade and gender (%) 21

FIGURE 21: Students spending four or more hours per week doing physical activity outside of school hours, by grade and gender (%) 22

Health Risk Behaviours 23

Sedentary Behaviour 23

FIGURE 22: Students who spend two hours or more watching television on a weekday, by grade and gender (%) 23

FIGURE 23: Students who spend two hours or more watching television per day on a weekend, by grade and gender (%) 24

FIGURE 24: Students who spend two hours or more playing on a computer or a games console on a weekday, by grade and gender (%) 24

FIGURE 25: Students who spend two hours or more using a computer for chatting on-line on a weekday, by grade and gender (%) 25

Substance Abuse 25
FIGURE 26: Having ever smoked tobacco, by grade and gender (%) 25
FIGURE 27: Daily smokers, by grade and gender (%) 26
FIGURE 28: Students who report being really drunk at least twice by grade and gender (%) 26
FIGURE 29: Grades 9 and 10 students having five or more drinks (four or more for females) more than once a month, by gender (%) 27
FIGURE 30: Grades 9 and 10 students reporting cannabis use in the last 30 days, by gender (%). 27
TABLE 3: Students indicating risk behaviours pose "slight" or "no risk" to health, by grade and gender (%) 28
Sexual Practices 29
FIGURE 31: Grades 9 and 10 students who report having had sexual intercourse, by gender (%) 29
FIGURE 32: Grades 9 and 10 students who report a condom was used the last time they had sexual intercourse, by gender (%) 30
Bullying 30
FIGURE 33: Students who report having been bullied at school in the past couple of months, by grade and gender (%) 30
FIGURE 34: Students who report having bullied others at school in the past couple of months, by grade and gender (%) 31
TABLE 4: Most common types of bullying, by grade and gender (%) 31
Injuries 32
FIGURE 35: Students reporting an injury during the past 12 months requiring treatment by a doctor or nurse, by grade and gender (%) 33
TABLE 5: Locations of the most serious injury in the past 12 months, by grade and gender (%) 33
Summary/Conclusion 34
References 35
Appendix 38

NWT Executive Summary: Student Voices on Health

Healthy behaviours and healthy choices are fundamental to a good education and superior quality of life. As such, schools offer a significant opportunity to educate young people about healthy lifestyles and to help foster healthy behaviours among our young people. In the Northwest Territories (NWT), schools play a much more central role in health promotion than in many other parts of Canada. Schools are a significant focal point of every NWT community, often serving in capacities that are additional to their mandate. However, in the pursuit of health promotion we must first understand what our young people think about their health, their challenges, and their choices. *Health and Health-Related Behaviours Among Young People NWT* is our students' voice about their health and their experience in NWT communities.

The Health Behaviours in School-aged Children (HBSC) study is conducted every four years by Queen's University in partnership with the Public Health Agency of Canada (PHAC) and Health Canada. During the 2010/11 school year the HBSC surveyed students in Grades 6 to 10 in most schools in the NWT. The report presents student responses by age and gender, and provides comparison to students in the rest of Canada. In past years only a national report was available; however, PHAC provided funding for this cycle so that a territorial report could be completed in addition to the national report.

Much of the information provided in *Health and Health-Related Behaviours Among Young People NWT* echoes the discussions that took place during the Aboriginal Student Achievement (ASA) forums held in 2010-2011. Many in the NWT see the intrinsic link between student health and academic achievement and understand that, only through collaborative efforts, can meaningful improvements be made. In addition, by examining educational practice through a health behaviour lens, we can learn new ways to ensure that our schools are environments where every student can realize his or her potential.

Health and Health-Related Behaviours Among Young People NWT also affirms the need for partnerships among the departments of the Government of the Northwest Territories (GNWT). A good example of such a partnership is the Healthy Choices Framework (HCF), which is an interdepartmental committee that helps coordinate health promotion. However, the need for partnerships extends well past government departments and should include schools, boards, community organizations, Aboriginal governments, NGOs, and other stakeholders.

Health and Health-Related Behaviours Among Young People NWT presents data on the health of young people in the NWT in the following categories: Mental Health, Environmental Influences, Health Promoting Behaviours, and Health Risk Behaviours.

Mental Health: Mental Health among young people in the NWT has been identified in the report as one area that requires special attention. A picture of mental health was constructed through a series of questions which looked at an array of feelings and behaviours about which students could report (see Appendix A). Youth in the NWT reported poorer results in most mental health indicators when compared to students in the rest of Canada. Female students in particular reported a higher level of emotional problems than both males in the NWT and females in the rest of Canada. Both male and female students reported lower levels of prosocial behaviour and life satisfaction than the national average.

Environmental Influences: Students reported that their communities were safe at a comparable level to the rest of Canada. However, significantly fewer reported that they could trust the people in their neighbourhoods, especially female students in Grades 9-10. Younger students largely reported that there were good places to spend their free time in their community, but this perception decreased significantly in the upper grades. NWT students also consistently reported lower numbers in regards to their parents understanding them.

Health Promoting Behaviours: Issues related to overweight/obesity and low physical activity have also been identified in the report as requiring special attention. NWT students reported higher levels of overweight and obesity according to Body Mass Index (BMI). Students also reported fewer hours of physical activity, both during and after school hours.

Health Risk Behaviours: NWT students report similar numbers for most health risk behaviours as students in the rest of Canada but report higher numbers in having smoked tobacco. In addition, students in Grades 6-8 report higher levels of being bullied and bullying others than students in the rest of Canada. Forms of bullying most commonly reported by Grade 6-8 male students were being called mean names, being excluded, and physical bullying. Grade 6-8 female students reported similarly but more commonly reported having lies or rumours spread about them instead of physical bullying.

In addition to identifying mental health and obesity/overweight, the researchers have also identified relationships with others as requiring special attention. Indicators such as bullying, parental understanding and expectations, and levels of trust all speak to the importance of healthy interpersonal relationships. The study demonstrates that the interpersonal relationships students have with their parents, teachers, community, and peers have a significant impact upon their overall health and, undoubtedly, their academic performance.

Health and Health-Related Behaviours Among Young People NWT affords us an opportunity to form a deeper understanding of the experiences, attitudes, and health of our youth. As a territory we can use the report to inform practice, target areas of concern, and consider how each of us contributes to the overall health and wellness of our young people. It is also hoped that future territorial HBSC reports will be made available so that we can see progress and map trends in behaviours and attitudes. *Health and Health-Related Behaviours among Young People NWT* reinforces the sentiment that we all have a role to play in the health and success of our youth, and that we must listen to the voices of our young people when we consider how to move forward.

Executive Summary prepared by Tom Aikman; Physical Education, Health, Wellness and Nutrition Coordinator; Early Childhood and School Services; Department of Education, Culture and Employment; GNWT.

Introduction

Knowledge about young people's attitudes, behaviours, and physical and psychological well-being, and the factors that influence them is essential for the development of effective health education and school health promotion policy, programs, and practice. Since 1990, the Social Program Evaluation Group (SPEG) at Queen's University, Faculty of Education has been collecting national data on these issues every four years from students ages 11 to 15 through a large-scale survey, the Health Behaviour in School-aged Children (HBSC) study. The purpose of the HBSC study is to gain insight about and increase our understanding of young people's health, well-being, and health behaviours within their social contexts.

There are now 43 HBSC participating countries and regions, in Europe, North America, and Israel. The HBSC researchers come from a variety of countries, disciplines, and theoretical perspectives. For example, the Canadian team based at Queen's University includes researchers from the areas of community health and epidemiology, education, kinesiology and health studies, and psychology. HBSC is sponsored by the World Health Organization (WHO) and funded nationally by the Public Health Agency of Canada and Health Canada and supported by the Joint Consortium for School Health (JCSH).

In accordance with the WHO perspective, health is acknowledged as a resource for everyday living and not just the absence of disease. As such, the HBSC regards young people's health in its broadest sense, encompassing physical, social, and emotional well-being. The HBSC is concerned about adolescent development so examines differences across grades and between the two genders. Furthermore, it incorporates contextual determinants such as the home, school, peers, neighbourhoods, and geographic locations, that may shape or influence a variety of behaviours, attitudes, and outcomes for young people. A broad range of outcomes are examined in the study in relation to the above three dimensions; these include the conventional health-compromising behavioural outcomes, such as smoking, alcohol use, limited physical activity, bullying, and injuries. In addition, the HBSC measures positive adolescent developmental outcomes such as happiness, life satisfaction, emotional well-being, relationships with others, attachment and connectedness to school, and student participation in curricular and extra-curricular activities (Currie et al., 2008). The items have been developed and validated by cross-national teams of researchers since the inception of the study in the mid-1980s (Currie et al., 2008). Although there are limitations with the study in respect to the cross-sectional nature of the data (thereby limiting the possibility of drawing cause and effects conclusions) and the limited number of questions on specific health topics within a broad-based survey, the HBSC is the most comprehensive instrument measuring adolescent health currently available. Its development by experts from Europe and North America and its ongoing usage by policymakers and practitioners attest to its viability.

The primary purpose of the HBSC study in Canada is to collect data on school-aged young people that allows researchers, policy-makers, and practitioners to gain insights into young people's attitudes and behaviours, and examine the relationships between contextual factors and health behaviours. By having such data over time and across different jurisdictions, it is possible to effect changes that could promote healthier lives for adolescents. In Northwest Territories, the instrument was given to intact school classes by classroom teachers. With the cooperation of the different school districts and the territorial government, we were able to gain access to most schools in the territory. Only students whose parents refused their participation did not take part.

TABLE 1

Table 1 details the sample size for the HBSC study. The overall sample is 26,047 including NWT and 24,360 without NWT. The NWT sample is 1,687 students. For presentation purposes the students are combined into Grades 6 to 8 and Grades 9 and 10 groupings, corresponding to the two versions of the questionnaire used to collect the data.

DISTRIBUTION OF RESPONDENTS BY GENDER AND GRADE

Grades 6 to 8	Males	Females	Total
NWT	469	533	1002
Rest of Canada	7272	7336	14608
Grades 9 and 10			
NWT	377	308	685
Rest of Canada	4760	4992	9752

Outline of Report

This report presents key findings from the 2009/10 cycle of the HBSC survey in Northwest Territories and includes chapters on the following topics:

1. Mental Health
2. Environmental Influences (neighbourhood and parents; friends; school setting)
3. Health Promoting Behaviours (eating and diet, physical activity)
4. Health Risk Behaviours (sedentary behaviour, substance abuse, sexual practices, bullying, injuries)

The choice of these focus topics was made in consultation with the JCSH, departments of health and education in the provincial/territorial jurisdictions, and researchers at Queen's University. These youth health outcomes are examined in relation to gender and age. A good rule of thumb is that differences between Canada and Northwest Territories are statistically significant if they are 5% or higher, although differences of 3% or more are significant for questions with very high (greater than 85%) or very low (less than 15%) agreement.

The final chapter of the report pulls together the results from across the country and from Northwest Territories, pinpointing areas where Northwest Territories have reasons to celebrate and areas where there are ongoing concerns.

Mental Health

There is growing recognition within Canada of the critical nature of improving the mental health of young Canadians with a particular emphasis on positive mental health in contrast to what has historically been a focus on mental illness. Children with positive mental health tend to have better outcomes throughout life, while children with more mental health difficulties experience a range of lifetime difficulties (Buote, 2009). This trend to move away from a deficit model of mental health toward a more balanced view (Keyes, 2006) measuring the dual (positive and negative) nature of mental health is further reinforced by a growing acknowledgment of the importance of developmental assets in young people's lives (Benson & Scales, 2009). Assets tend to promote greater personal resilience, namely, the ability to achieve success despite obstacles (Fergus & Zimmerman, 2005).

FIGURE 1
EMOTIONAL WELL-BEING

Emotional well-being is related to both grade and gender with males reporting higher levels than females within the same grade and Grade 6-8 reporting higher levels than Grade 9-10 students (see Appendix A for scale items). In Grade 6-8, reported emotional well-being levels are lower for NWT students than their counterparts in the rest of Canada.

STUDENTS IN GROUP WITH HIGHEST SCORE ON EMOTIONAL WELL-BEING SCALE, BY GRADE AND GENDER (37% OF ALL STUDENTS ARE IN THIS GROUP)

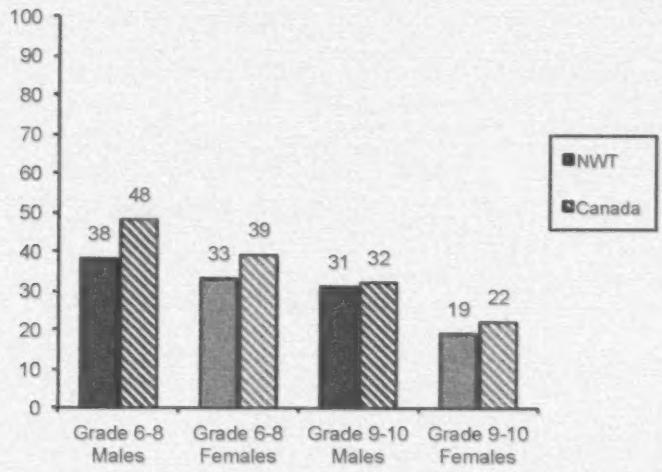


FIGURE 2
EMOTIONAL PROBLEMS

Emotional problems are more often reported by females than males in Northwest Territories and the rest of Canada (see Appendix A for scale items). They increase across grades for females but remain fairly stable for males. For all gender-grade combinations, students in Northwest Territories report more emotional problems than students in the rest of Canada, especially for female students; Grade 6-8 NWT females report 9% higher than their Canadian peers, and Grade 9-10 report 8% higher.

STUDENTS IN GROUP WITH HIGHEST SCORE ON EMOTIONAL PROBLEMS SCALE, BY GRADE AND GENDER (34% OF ALL STUDENTS ARE IN THIS GROUP)

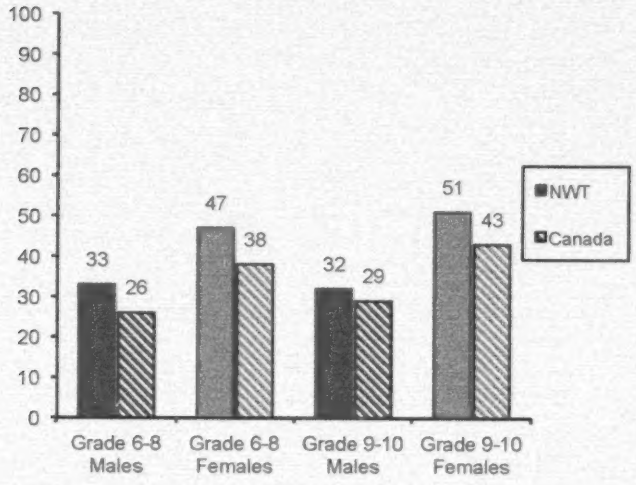


FIGURE 3
PROSOCIAL BEHAVIOUR

For both Northwest Territories and the rest of Canada, females report more prosocial behaviour than males (such behaviours reflect helping others voluntarily; see Appendix A for scale-items). While younger students report more prosocial behaviour than older students in the rest of Canada, students in the Northwest Territories are consistent across the grades. Students in Northwest Territories report less prosocial behaviour than students in the rest of the country, especially for Grade 6-8 students.

STUDENTS IN GROUP WITH HIGHEST SCORE ON PROSOCIAL BEHAVIOURS SCALE, BY GRADE AND GENDER (32% OF ALL STUDENTS ARE IN THIS GROUP)

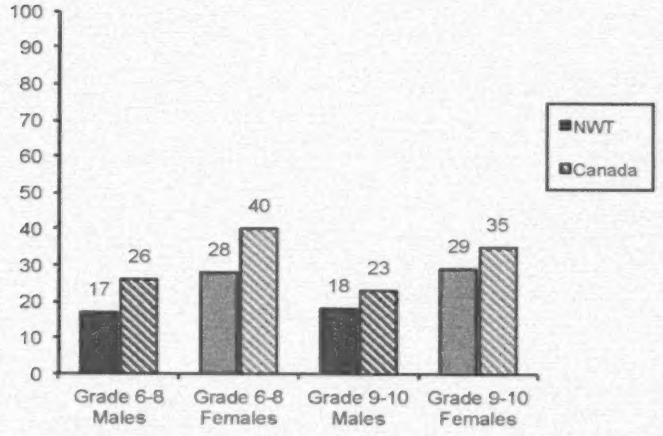


FIGURE 4
BEHAVIOURAL PROBLEMS

For both the Northwest Territories and Canada, self-reported behavioural problems are related to grade and gender (see Appendix A for scale items). Younger students and females report fewer behavioural problems than older students and males. While both males and females report an increase in behavioural problems across grades, the most substantial increase was with males from the rest of Canada (12%). NWT students reported more behavioural problems than students in the rest of Canada for Grade 6-8 females and similar numbers for the other groups.

STUDENTS IN GROUP WITH HIGHEST SCORE ON BEHAVIOURAL PROBLEMS SCALE, BY GRADE AND GENDER (36% OF ALL STUDENTS ARE IN THIS GROUP)

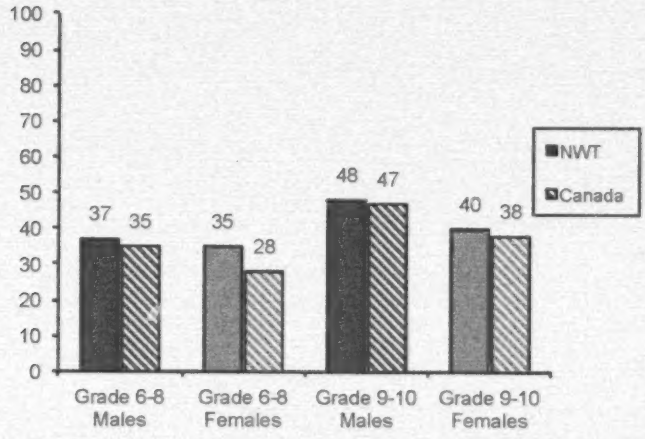
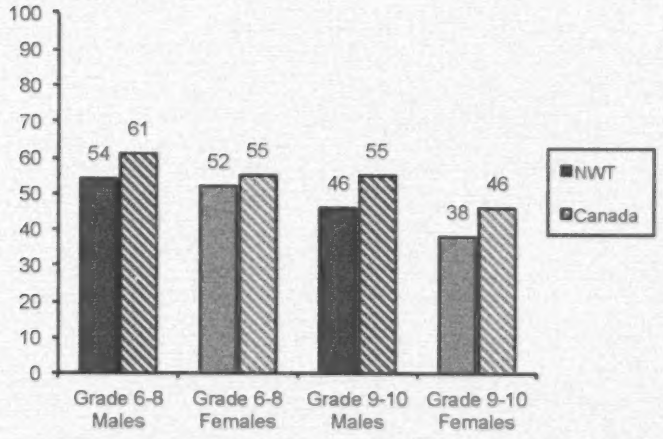


FIGURE 5
LIFE SATISFACTION

The percentage of students reporting high life satisfaction decreases with age. Females, regardless of grade or location, report lower levels of life satisfaction than males. For all grade-gender combinations, Northwest Territories adolescents indicate they have lower life satisfaction than their peers in the rest of Canada.

STUDENTS WHO RESPONDED 8 TO 10 ON A 0=WORST POSSIBLE TO 10=BEST POSSIBLE LIFE SATISFACTION SCALE, BY GRADE AND GENDER (%)



Environmental Influences

Neighbourhood and Parents

Neighbourhoods represent key environmental settings for youth, as policies, physical spaces, and structures, and cultural, social, and interpersonal interactions that occur in these environments influence their subsequent behaviour, and ultimately their health experiences (Bernard et al., 2007; Green et al. 1996; Sallis & Owen, 2002).

While neighbourhoods delimit the surroundings of a young person, the family provides the first socializing context in a young person's development and has the central role in socialization (Parke & Buriel, 2006). Children learn and develop values and norms based on those modelled, taught, and enforced within the family environment. Patterning health and healthy behaviours begins with the family.

The family tends to decrease in influence as young people mature, with adolescence typically being a time when young people begin to challenge parental controls and values and to turn more to their peers (Collins & Steinberg, 2006). This growth in personal autonomy during the period of adolescence can result in varying degrees of conflict with parents. However, the family remains an essential source of support and a critical agent of intervention and health promotion throughout the school years. Relationships with parents, including communication and connectedness with family, have been shown to be highly correlated to reduced delinquent behaviour, and lower rates of depression and psychosomatic symptoms (Currie et al., 2008).

FIGURE 6
SAFE FOR YOUNG CHILDREN TO PLAY

Relatively high numbers (around three-quarters) of students believe their neighbourhoods are safe for children to play in. Those percentages are relatively similar in the Northwest Territories with the rest of Canada for all age-gender groups except Grade 6-8 males (8% lower than the rest of Canada).

STUDENTS THAT EITHER AGREE OR STRONGLY AGREE THAT "IT IS SAFE FOR YOUNGER CHILDREN TO PLAY OUTSIDE DURING THE DAY," BY GRADE AND GENDER (%)

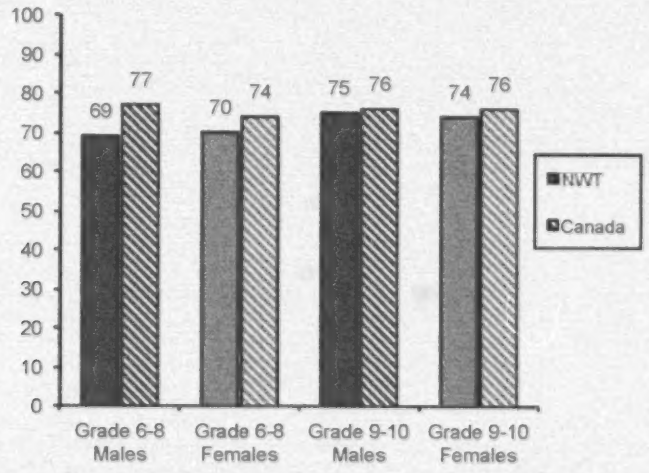


FIGURE 7
TRUSTING PEOPLE

Just over 60% of males and a somewhat smaller percentage of females across the rest of Canada feel that they can trust people in their neighbourhood. The percentages are significantly lower in Northwest Territories than the national average in all age-gender groups, especially for females (13% lower in Grade 6-8; 19% lower in Grade 9-10).

STUDENTS THAT EITHER AGREE OR STRONGLY AGREE THAT "YOU CAN TRUST PEOPLE AROUND HERE," BY GRADE AND GENDER (%)

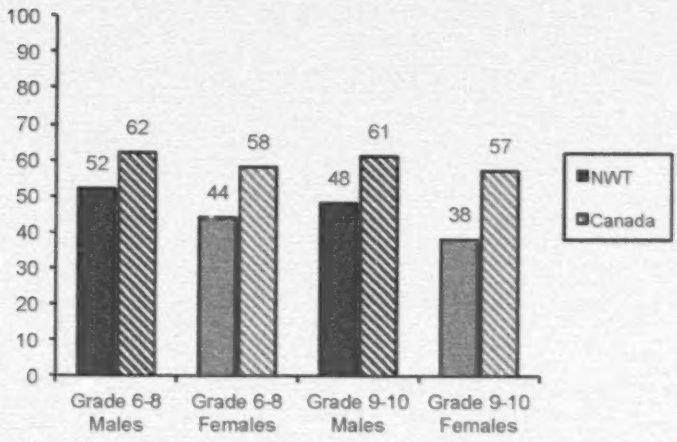


FIGURE 8
PLACES TO SPEND FREE TIME

Thinking that there are good community places to spend one's free time is related most strongly to grade in that Grade 9-10 students are less likely to endorse the statement than Grade 6-8 students. There is no difference between NWT and the rest of Canada at the Grade 6-8 level but the numbers are lower in NWT at the Grade 9-10 level.

STUDENTS WHO AGREE OR STRONGLY AGREE WITH "THERE ARE GOOD PLACES TO SPEND YOUR FREE TIME (E.G., RECREATION CENTRES, PARKS, SHOPPING CENTRES) WHERE YOU LIVE," BY GRADE AND GENDER (%)

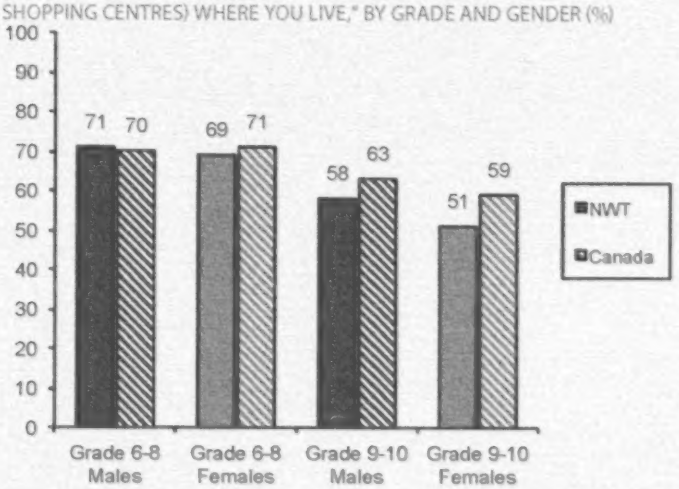


FIGURE 9
PARENTS ARE UNDERSTANDING

More males than females see their parents as understanding them with the rate highest for Grade 6-8 males at 82% (for NWT) and 85% (for the rest of Canada). Grade 9-10 females report the lowest parental understanding (59% rest of Canada; 53% NWT).
The Northwest Territories students consistently report lower numbers than those for the rest of Canada, with the highest discrepancy in Grade 9-10 (NWT 6% lower than the rest of the country).

STUDENTS WHO AGREE OR STRONGLY AGREE WITH THE STATEMENT "MY PARENTS UNDERSTAND ME," BY GRADE AND GENDER (%)

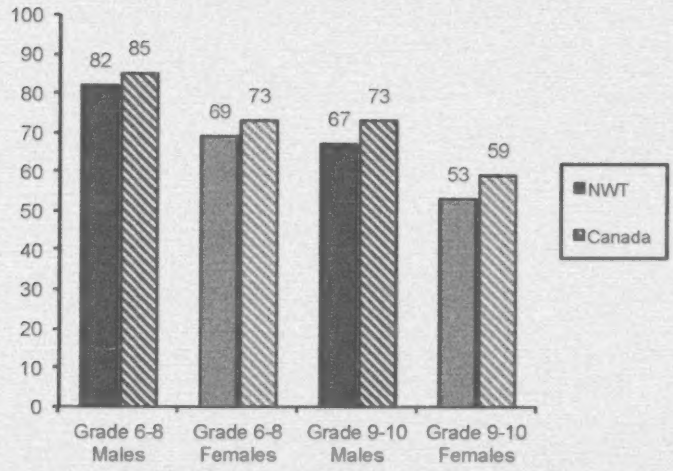
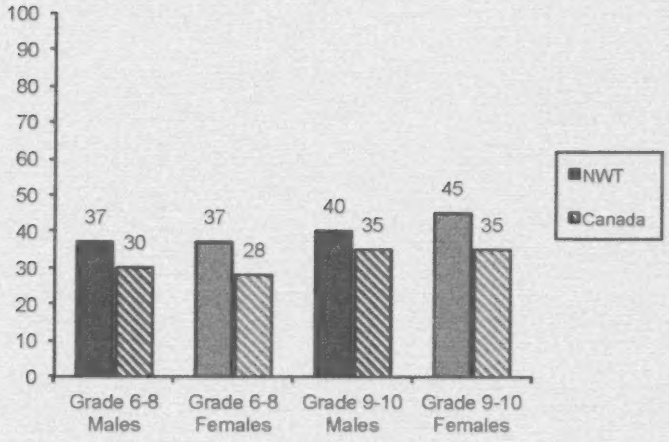


FIGURE 10
PARENTS' EXPECTATIONS

Across all the age-gender groups, students in Northwest Territories are much more likely to think their parents expect too much of them. NWT Grade 9-10 males (40%) and females (45%) are more in agreement than their Grade 6-8 counterparts (males at 37%; females at 37%).

STUDENTS WHO AGREE OR STRONGLY AGREE WITH THE STATEMENT "MY PARENTS EXPECT TOO MUCH OF ME," BY GRADE AND GENDER (%)



Friends

From childhood to adolescence, peer relationships become increasingly significant sources of support, companionship, information and advice. Peers can have short- and long-term beneficial effects on social, cognitive and academic adjustment (Hartup, 1993; Savin-Williams, & Berndt, 1990; Scholte & Van Aken, 2006). Peers provide young people with developmental opportunities and social possibilities that are not available through relationships with adults, (Scholte & Van Aken, 2006). Having friends, and having supportive friendships are associated with positive outcomes, such as feeling good about oneself, feeling connected with others, being positive in outlook, and contributing to successes in subsequent romantic relationships (Hartup, 1993).

FIGURE 11
FRIENDS OF SAME-SEX: EASY TO TALK TO

For both Northwest Territories and the rest of Canada, females report finding it easier to talk to friends of the same sex than do males. In all age-gender groups, students in Northwest Territories indicate they find it more difficult to talk to their same-sex friends than their peers in the rest of Canada.

STUDENTS WHO FIND IT EASY OR VERY EASY TO TALK TO SAME-SEX FRIENDS ABOUT THINGS THAT REALLY BOTHER THEM, BY AGE AND GENDER (%)

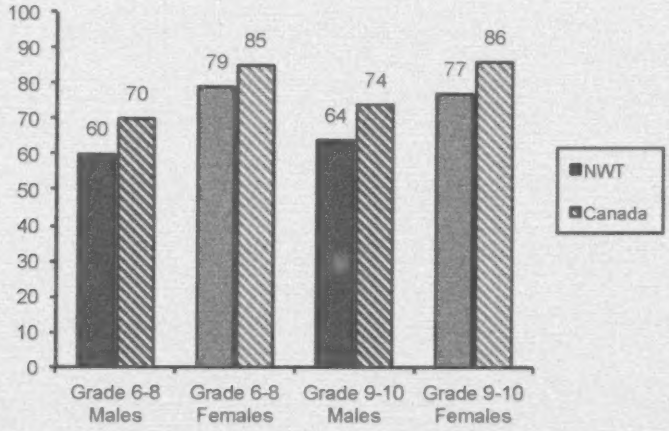
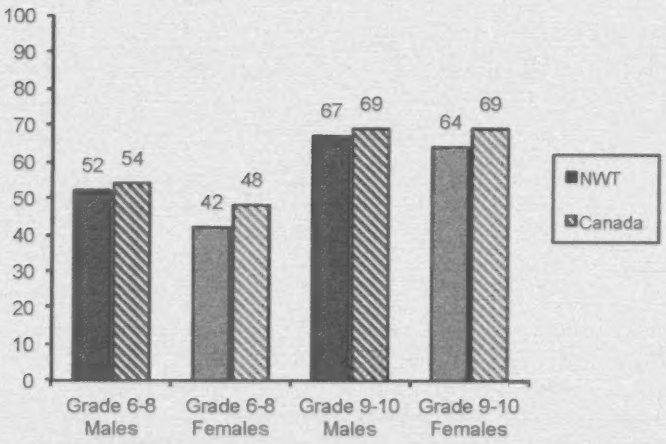


FIGURE 12
FRIENDS OF OPPOSITE-SEX: EASY TO TALK TO

As students move from Grades 6-8, they increase their self-assessed ease in talking with friends of the opposite sex considerably. While there is a gender difference in Grade 6-8 such that males state they find it easier to talk to opposite-sex friends than females, the gender gap disappears by Grade 9-10. Females in Northwest Territories report a lower level of ease in talking to opposite-sex friends when compared to females in the rest of Canada, while the male numbers are similar across groups.

STUDENTS WHO FIND IT EASY OR VERY EASY TO TALK TO OPPOSITE-SEX FRIENDS ABOUT THINGS THAT REALLY BOTHER THEM, BY AGE AND GENDER (%)



School Setting

Schools provide a "critical context for shaping children's self-esteem, self-efficacy and sense of control over their lives" (Stewart, Sun, Patterson, Lemerle, & Hardie, 2004, p. 27). As children move forward into their early and later teen years, schools become more important, and the support of teachers and peer connections within schools may have an even greater influence than their home context (Stewart, 2008; Stewart et al., 2004). Young people who feel connected with their school and have positive experiences with teachers and peers are more likely to develop strong emotional bonds and self-confidence. They are much less likely to engage in health-compromising activities or struggle with their mental health (e.g., Wold, Samdal, Nutbeam, & Kannas, 1998). Those young people who do not feel accepted by their peers or connected with school are the most likely to have lower levels of confidence and sense of self (King, Vidourek, Davis, & McLellan, 2002).

FIGURE 13
FEELING OF BELONGING AT SCHOOL

Males and females are similar in the extent to which they feel they belong at their school. However, older students report lower belongingness than younger students. Similar portions of NWT students agree with the statement as their peers in the rest of Canada.

STUDENTS WHO AGREE OR STRONGLY AGREE WITH THE STATEMENT "I FEEL I BELONG AT THIS SCHOOL," BY GRADE AND GENDER (%)

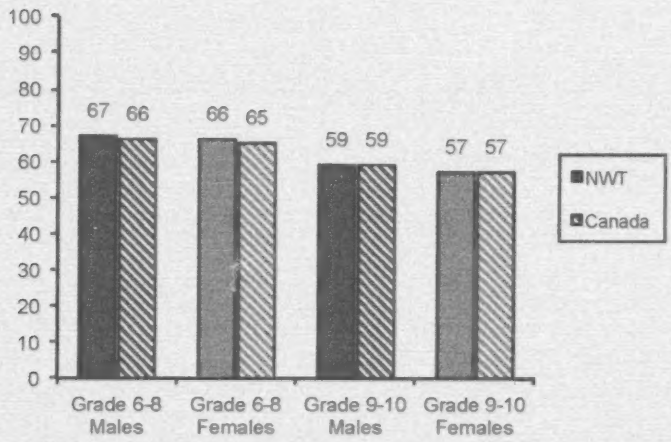


FIGURE 14
FAIRNESS OF SCHOOL RULES

While there is little difference between males and females in their views on the fairness of school rules, younger students tend to see the rules are slightly fairer than older students. The students in NWT and elsewhere in Canada hold very similar views on the fairness of school rules.

STUDENTS WHO AGREE OR STRONGLY AGREE WITH THE STATEMENT "THE RULES IN THIS SCHOOL ARE FAIR," BY GRADE AND GENDER (%)

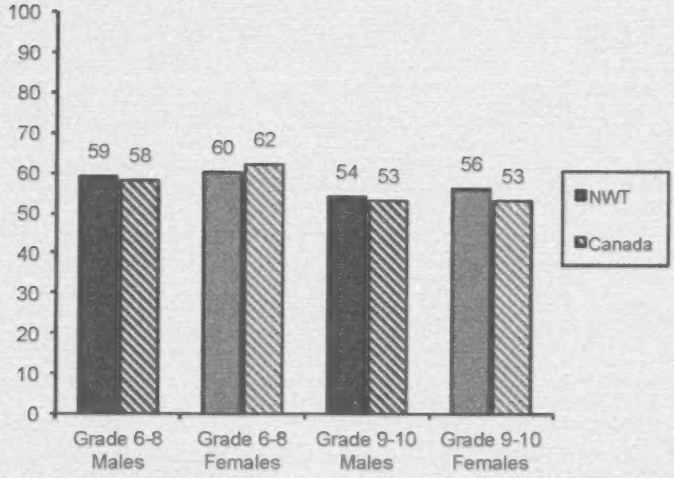
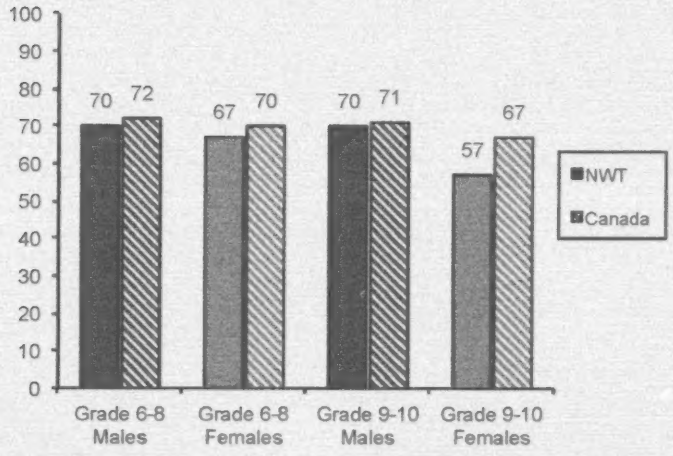


FIGURE 15
ACCEPTANCE BY CLASSMATES

There are relatively few differences between the Northwest Territories males and the rest of Canada with respect to feelings of acceptance, regardless of grade level. While the Grade 6-8 NWT females show a similar level of classmate acceptance as their Canadian peers, the Grade 9-10 NWT are 10% lower in agreement than their Canadian counterparts.

STUDENTS WHO AGREE OR STRONGLY AGREE WITH THE STATEMENT "OTHER STUDENTS ACCEPT ME AS I AM," BY GRADE AND GENDER (%)



Health Promoting Behaviours

Healthy Eating

Following the eating pattern in Canada's Food Guide will help children and teenagers maintain good health and achieve optimal growth and development. Healthy and nutritious food items, such as fruits and vegetables, need to be part of a healthy eating pattern and should be consumed frequently. Conversely, young people should limit the frequency in which they consume foods and beverages high in calories, fat, sugar, and/or salt (Gore, Foster et al., 2003). Youth should also avoid frequently eating at fast food restaurants, as the foods sold at these establishments, while affordable, are high in calories and linked to obesity and poor health (Bowman, Gortmaker et al., 2004).

TABLE 2
FOOD AND BEVERAGE FREQUENCY PATTERNS

Grades 6 to 8

Females are more likely to report eating fruits and vegetables than males in NWT and the rest of Canada. Grade 6-8 male and female students from NWT report eating fewer fruits and vegetables than students in the rest of the country. NWT students report eating less sweets than other Canadian students. Their self-reported consumption of whole grains is on par with the rest of the country at around 40%. Students in NWT indicate they eat considerably more game meat than other Canadian students.

STUDENTS EATING FOOD ITEMS OR DRINKING BEVERAGES ONCE PER DAY OR MORE OFTEN, BY GRADE AND GENDER (%)

Grades 6 to 8	Males		Females	
	NWT	Canada	NWT	Canada
Fruit	34	42	43	50
Vegetables	28	40	36	48
Sweets/candy/chocolate	12	17	14	17
Soft drinks with sugar	14	13	11	8
Potato chips	6	5	6	4
French fries	4	3	2	2
Dark green vegetables	12	15	15	17
Orange vegetables	14	17	15	18
Fruit juice	37	39	36	42
Whole grain breads or cereals	44	42	39	40
Energy drinks	4	3	3	2
Game from hunting	11	5	9	3

TABLE 2 continued
FOOD AND BEVERAGE FREQUENCY PATTERNS

Grades 9 and 10

NWT females and their Canadian peers continue to report eating more fruits and vegetables compared to males, although they report eating slightly less than their Grade 6-8 counterparts. All food choices show a decrease over grades with the exception that males in both NWT and the rest of Canada report an increase the number of sweets and candy, and all females report an increase their consumption of soft drinks.

STUDENTS EATING FOOD ITEMS OR DRINKING BEVERAGES ONCE PER DAY OR MORE OFTEN, BY GRADE AND GENDER (%)

Grades 9 and 10	Males		Females	
	NWT	Canada	NWT	Canada
Fruit	32	36	40	45
Vegetables	28	38	37	47
Sweets/candy/chocolate	17	21	14	19
Soft drinks with sugar	18	18	14	11
Potato chips	6	6	5	3
French fries	2	4	1	3
Dark green vegetables	10	12	11	15
Orange vegetables	11	13	12	14
Fruit juice	33	36	34	39
Whole grain breads or cereals	41	37	36	39
Energy drinks	5	4	2	1
Game from hunting	8	5	6	3

FIGURE 16
DIET IN THE PAST 12 MONTHS

While approximately 40% of females in Grades 6-8 report having tried to lose weight in the past year, over 50% of females in Grades 9-10 indicate that they have done so. In contrast, fewer males across grades report trying to lose weight. While females in NWT are on par with the rest of Canada, males in NWT report higher dieting than the rest of the country (9% higher for Grade 6-8 males; 8% higher for Grade 9-10 males).

STUDENTS WHO HAVE DIETED OR CHANGED EATING HABITS TO LOSE WEIGHT IN THE PAST 12 MONTHS, BY GRADE AND GENDER (%)

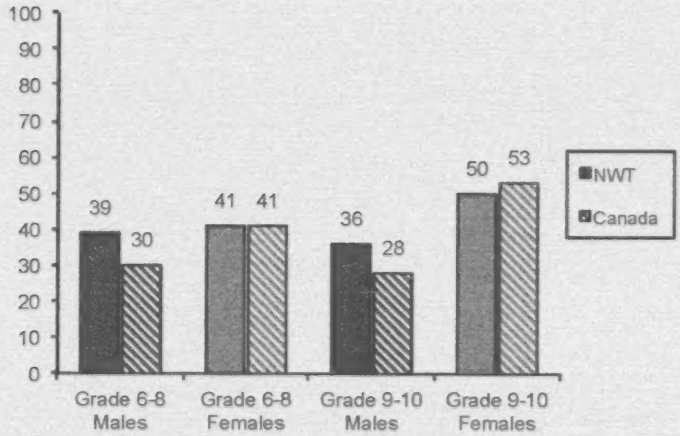


FIGURE 17
BMI CLASSIFICATION

The body mass index (BMI) is a measure which combines data on height, weight, age, and gender to classify individuals as healthy weight, overweight, or obese. The proportions of BMI-assessed overweight or obese males in both the NWT and the rest of Canada are higher than females. In all gender-grade groups, more students in Northwest Territories self-report themselves as overweight or obese than students in the rest of Canada.

STUDENTS CLASSIFIED AS OVERWEIGHT OR OBESE ON THE BODY MASS INDEX (BMI), BY GRADE AND GENDER (%)

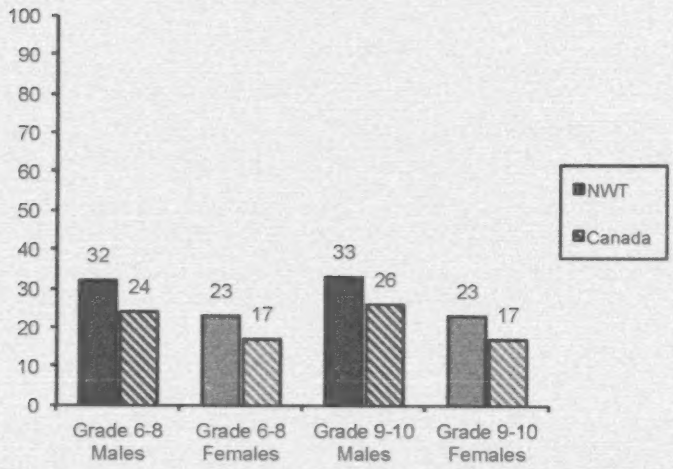
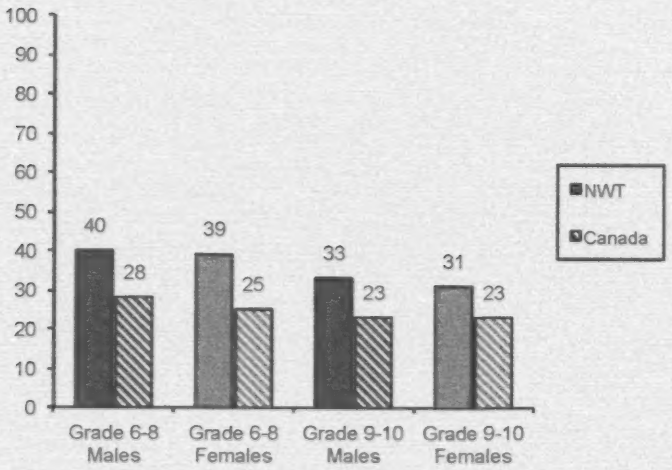


FIGURE 18
GOING TO SCHOOL OR TO BED HUNGRY

Younger students in the Northwest Territories are somewhat more likely to report going to school or to bed hungry than older students. For each gender-grade combination, but most especially for Grade 6-8 students, NWT students are much more likely to say they go to school or to bed hungry than students in the rest of Canada.

STUDENTS WHO REPORT THEY GO TO SCHOOL OR TO BED HUNGRY BECAUSE THERE IS NOT ENOUGH FOOD AT HOME AT LEAST SOMETIMES, BY GRADE AND GENDER (%)



Physical Activity

Physical activity is defined as any bodily movement produced by the muscles that result in an increase in energy expenditure. It includes non-vigorous tasks, such as light walking, and moderate or vigorous tasks, such as brisk walking, jogging, bicycling, playing soccer, and playing basketball. Physical activity needs to be of at least a moderate intensity to generate health benefits (Janssen & LeBlanc, 2010). Physical activities of moderate to vigorous intensity are those that will make the individual breathe more deeply and rapidly and increase his or her body temperature (e.g., makes him or her feel warm, sweat). The health benefits of moderate to vigorous physical activity in children and youth include the regulation of body weight and chronic-disease risk factors, improved fitness, the development of healthy and strong bones, and improved mental health (Janssen & LeBlanc, 2010).

FIGURE 19
PHYSICAL ACTIVITY IN THE PAST SEVEN DAYS

Compared to males, relatively fewer females report engaging in one hour of physical activity on a daily basis. Differences between NWT and the rest of Canada on daily physical activity are fairly small.

STUDENTS PHYSICALLY ACTIVE EVERY DAY OVER THE PAST SEVEN DAYS FOR A TOTAL OF AT LEAST 60 MINUTES PER DAY, BY GRADE AND GENDER (%)

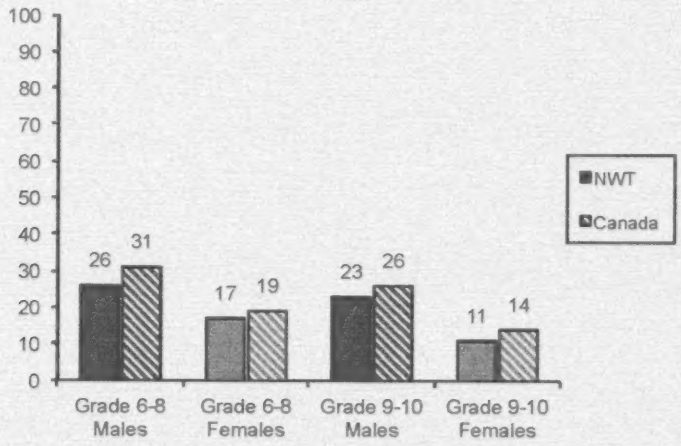


FIGURE 20
PHYSICAL ACTIVITY IN CLASS TIME AT SCHOOL (NOT JUST PHYS. ED. CLASS)

Across the rest of Canada, males report an increase in the amount of class time spent in physical activity from Grade 6-8 to Grade 9-10, while the time remains fairly level for females. In Northwest Territories, males report a small decrease in the older grades. Across all gender-grade groups, students in Northwest Territories report being less active in class than others in Canada, especially Grade 9-10 males as they report being 12% less active than their peers in Canada.

STUDENTS SPENDING FOUR OR MORE HOURS PER WEEK DOING PHYSICAL ACTIVITY IN CLASS TIME AT SCHOOL, BY GRADE AND GENDER (%)

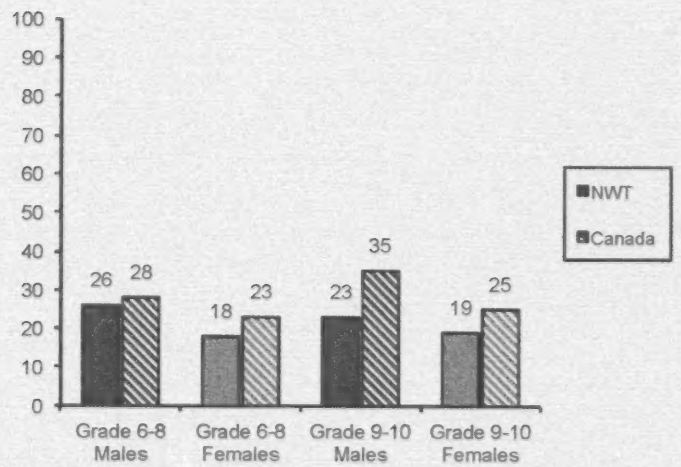
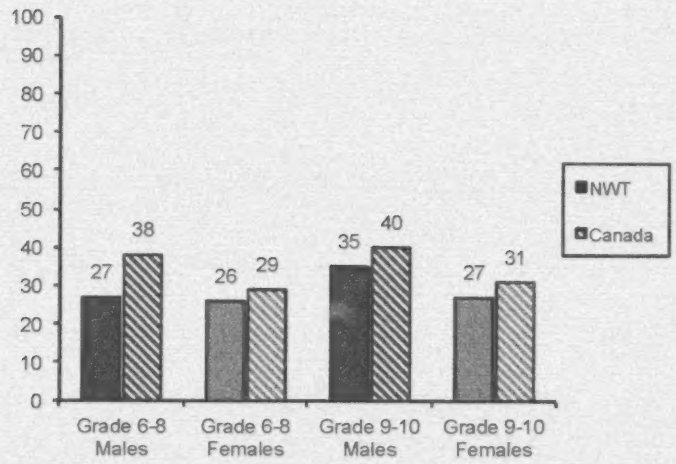


FIGURE 21
PHYSICAL ACTIVITY OUTSIDE OF SCHOOL HOURS

With respect to their self-perceptions, there is a gender gap in physical activity outside of school hours whereby males exceed females in both Northwest Territories and the rest of Canada with the exception of Grade 6-8 NWT students. While there is an increase in activity for all other groups across grades, NWT females remain the same. In Northwest Territories, males lag behind their Canadian counterparts (11% lower in Grade 6-8; 5% lower in Grade 9-10).

STUDENTS SPENDING FOUR OR MORE HOURS PER WEEK DOING PHYSICAL ACTIVITY OUTSIDE OF SCHOOL HOURS, BY GRADE AND GENDER (%)



Health Risk Behaviours

Sedentary Behaviour

Sedentary behaviour is different from physical activity and consists of activities in which there is little movement or energy expenditure. These activities include watching television, playing video games, using the computer, doing homework, reading, and motorized travel. The goal is to keep young people's sedentary behaviour levels to a reasonable and healthy level. Increased time spent engaging in sedentary behaviour, especially screen activities, such as watching television, using the computer, and playing video games, have been linked to several negative health outcomes (Tremblay, Colley et al., 2010). For example, obesity, unhealthy eating, decreased fitness, and substance use and abuse are all associated with excessive screen time.

FIGURE 22
HOURS WATCHING TELEVISION: WEEKDAY

About 60% of students in the rest of Canada and Northwest Territories indicate spending two hours or more each weekday watching television. Males report somewhat more television watching than females. The numbers in the rest of Canada and Northwest Territories are largely the same.

STUDENTS WHO SPEND TWO HOURS OR MORE WATCHING TELEVISION ON A WEEKDAY, BY GRADE AND GENDER (%)

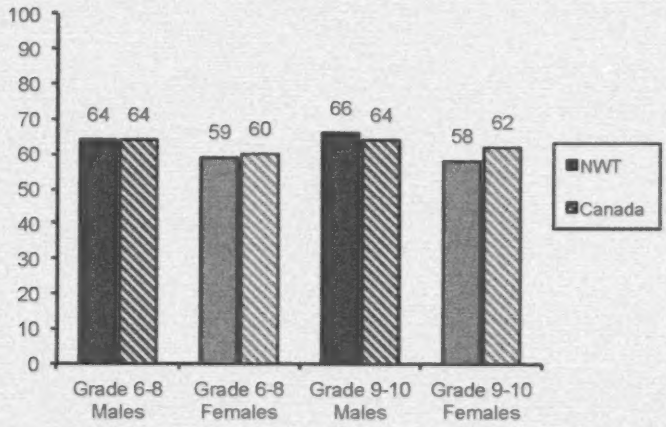


FIGURE 23
HOURS WATCHING TELEVISION: WEEKEND

Approximately three-quarters of students in the rest of Canada and Northwest Territories say they watch two or more hours of television on weekends. The numbers are similar between Northwest Territories and the rest of Canada.

STUDENTS WHO SPEND TWO HOURS OR MORE WATCHING TELEVISION PER DAY ON A WEEKEND, BY GRADE AND GENDER (%)

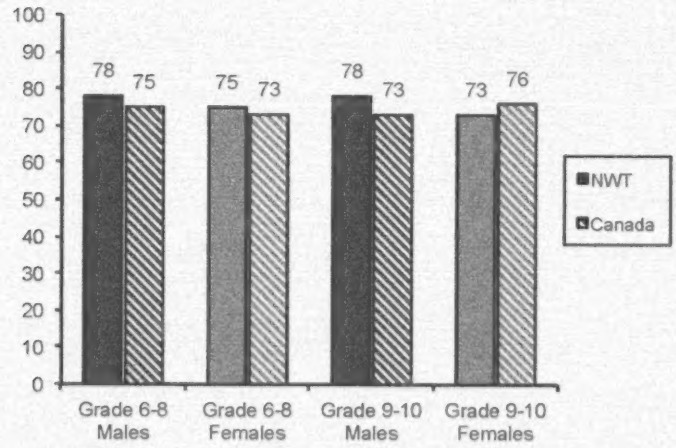


FIGURE 24
HOURS PLAYING ON A COMPUTER OR GAMES CONSOLE: WEEKDAY

Considerably more males than females indicate they spend two hours or more playing computer games in both Northwest Territories and the rest of Canada. For males, the students in Northwest Territories report more computer game playing than their Canadian peers. However, Grade 9-10 females report lower computer game playing than their Canadian counterparts (5% lower than the rest of Canada).

STUDENTS WHO SPEND TWO HOURS OR MORE PLAYING ON A COMPUTER OR A GAMES CONSOLE ON A WEEKDAY, BY GRADE AND GENDER (%)

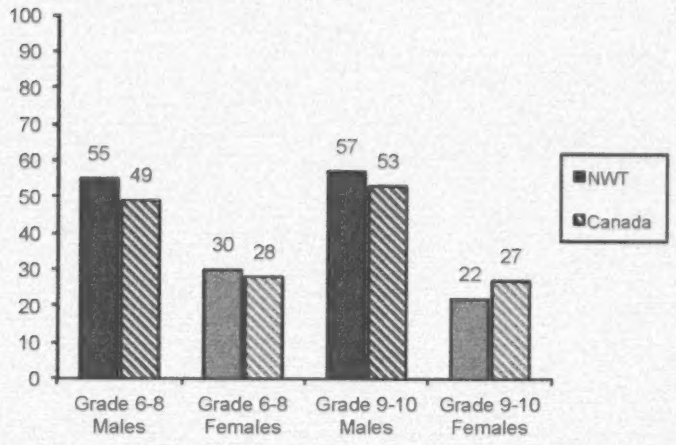
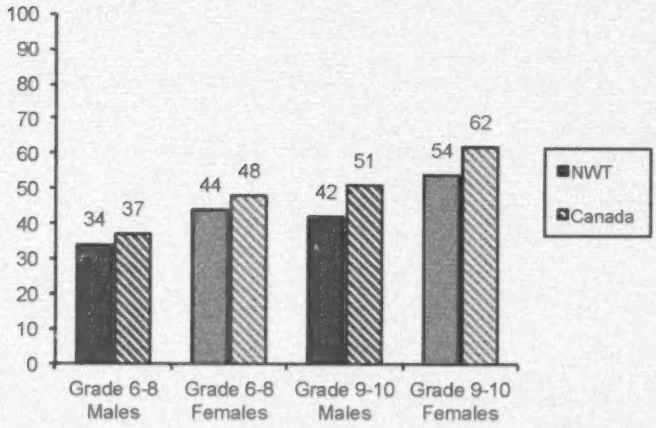


FIGURE 25
HOURS USING A COMPUTER FOR CHATTING ON-LINE: WEEKDAY

While self-reported on-line chatting increases across the grades for all students, the NWT students report less on-line chatting than their Canadian counterparts. The Grade 9-10 males report the largest difference with a 9% gap. Both NWT and Canadian females across the grades report more on-line chatting than males.

STUDENTS WHO SPEND TWO HOURS OR MORE USING A COMPUTER FOR CHATTING ON-LINE ON A WEEKDAY, BY GRADE AND GENDER (%)



Substance Abuse

During the adolescent years many lifelong health habits are established. It is also a period of experimentation with smoking, alcohol, and drugs and other risky behaviours (Chassin, Pitts, & Prost, 2002). For most adolescents, these behaviours are occasional in nature and a normal part of growing up (Nell, 2002). However, for a sizable minority of adolescents, these behaviours escalate and become more serious problems. Several risky behaviours tend to co-occur with other health problems in youth, such as injuries (Collin, 2006), cognitive and psychomotor impairment (Squeglia, Jacobus & Tapert, 2009), and social and emotional problems (Elgar, Knight, Worrall, & Sherman, 2003).

FIGURE 26
EVER SMOKED

Students in the Northwest Territories are more likely to state they have tried smoking than students in the rest of Canada. Having ever tried smoking on average triples across grades, with the increase greater in Northwest Territories than the rest of Canada. Furthermore, the gender gap between females and males is larger in Northwest Territories than in other parts of Canada with more females than males having tried smoking (4% gap in Grade 6-8; 5% in Grade 9-10 respectively).

HAVING EVER SMOKED TOBACCO, BY GRADE AND GENDER (%)

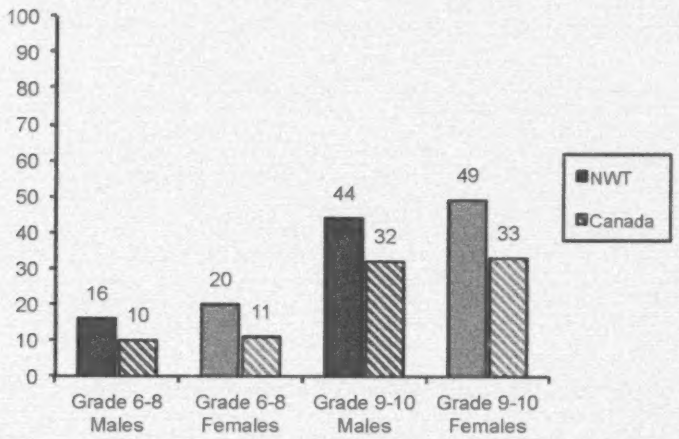


FIGURE 27
DAILY SMOKERS

Less than 2% of Grade 6-8 students state they are daily smokers in Grade 6-8 in the NWT and the rest of Canada. There is little difference between Grade 9-10 males in NWT and other parts of Canada; however, 8% more Grade 9-10 females in the NWT report daily smoking compared to their peers in the rest of Canada.

DAILY SMOKERS, BY GRADE AND GENDER (%)

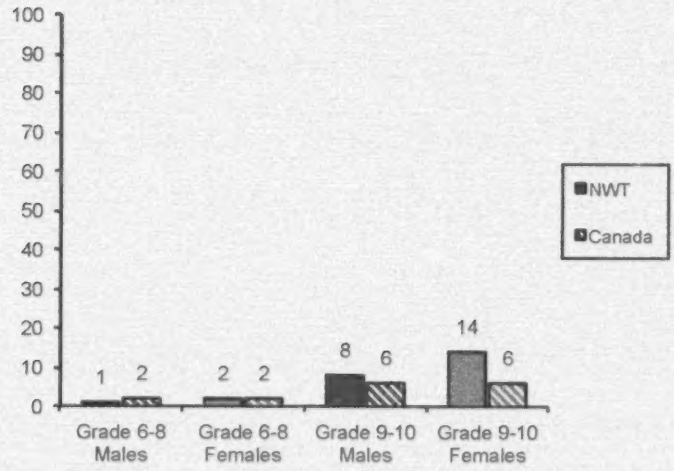


FIGURE 28
HAVING BEEN DRUNK

Less than 10% of students in Grade 6-8 report having been really drunk at least twice. This number increases to around 30% for Grade 9-10 students. There is little difference between males and females for the rest of Canada. However, the percentage for Grade 9-10 Northwest Territories males is 6% lower than the rest of Canada and 7% lower than Northwest Territories females.

STUDENTS WHO REPORT BEING REALLY DRUNK AT LEAST TWICE BY GRADE AND GENDER (%)

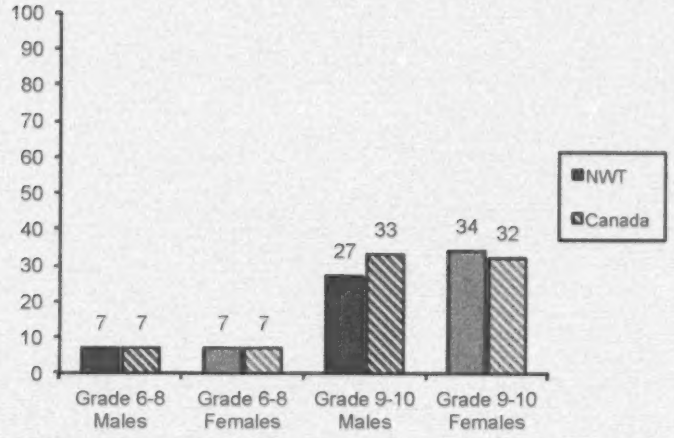


FIGURE 29
HAVING FIVE OR MORE DRINKS (FOUR OR MORE FOR FEMALES) ON ONE OCCASION

The proportion of Grade 9-10 students who report drinking heavily more than once a month is similar for male and females. Northwest Territories males are roughly on par with the rest of Canada, whereas Northwest Territories females report 3% higher heavy drinking than females in the rest of the country.

GRADES 9 AND 10 STUDENTS HAVING FIVE OR MORE DRINKS (FOUR OR MORE FOR FEMALES) MORE THAN ONCE A MONTH, BY GENDER (%)

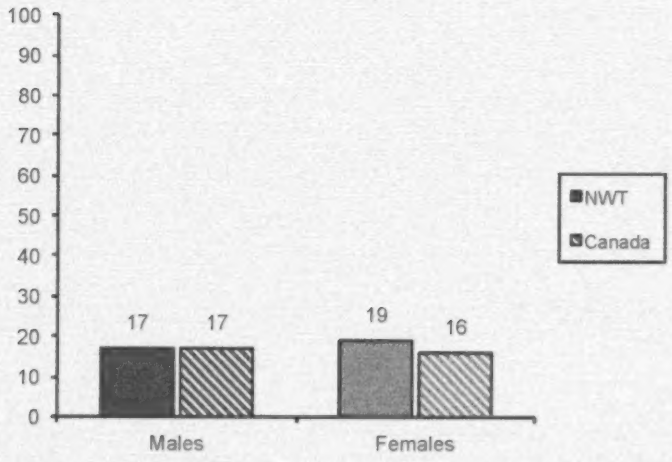


FIGURE 30
CANNABIS USE IN THE LAST 30 DAYS

While across Canada, males report slightly higher cannabis use than females, in Northwest Territories, the reverse is true. Females report a greater usage than males in Northwest Territories. In both cases, adolescents in Northwest Territories report higher cannabis use than their Canadian peers, especially so for females with a 9% difference.

GRADES 9 AND 10 STUDENTS REPORTING CANNABIS USE IN THE LAST 30 DAYS, BY GENDER (%)

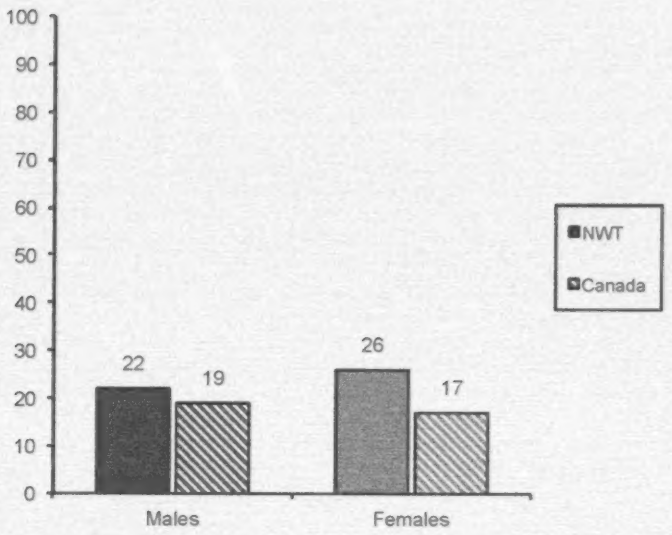


TABLE 3
RISK PERCEPTION

For students in both Northwest Territories and the rest of Canada, drinking alcohol once in a while is seen as least risky, while use of Ecstasy and use of hallucinogens on a regular basis are seen as most risky. Northwest Territories students see occasional and regular marijuana smoking as less risky than their Canadian peers, but drinking alcohol occasionally as more risky. Grade 9-10 Northwest Territories adolescents also view regular alcohol drinking as more risky than other Canadian adolescents. For both genders (and especially males), students in Northwest Territories find using other drugs (Ecstasy, hallucinogens, glue or solvents, pain relievers) less risky than Canadian students elsewhere.

STUDENTS INDICATING RISK BEHAVIOURS POSE "SLIGHT" OR "NO RISK" TO HEALTH, BY GRADE AND GENDER (%)

		Males		Females	
	Grades	NWT	Canada	NWT	Canada
smoking cigarettes once in a while	6 to 8	42	39	41	37
	9 and 10	41	44	39	43
smoking cigarettes on a regular basis	6 to 8	19	11	17	9
	9 and 10	16	9	10	6
smoking marijuana once in a while	6 to 8	31	23	28	18
	9 and 10	45	39	35	31
smoking marijuana on a regular basis	6 to 8	18	12	18	9
	9 and 10	26	19	17	11
drinking alcohol once in a while	6 to 8	52	62	54	59
	9 and 10	55	64	52	66
drinking alcohol on a regular basis	6 to 8	21	20	20	13
	9 and 10	19	19	12	12
Use Ecstasy once in a while	9 and 10	22	15	14	13
Use Ecstasy on a regular basis	9 and 10	14	7	7	4
Use hallucinogens, LSD or PCP once in a while	9 and 10	19	12	12	9
Use hallucinogens, LSD or PCP on a regular basis	9 and 10	13	7	7	4
Use glue or solvents once in a while	9 and 10	24	16	14	13
Use glue or solvents on a regular basis	9 and 10	16	8	9	5
Use pain relievers, tranquilizers or stimulants once in a while	9 and 10	24	15	13	13
Use pain relievers, tranquilizers or stimulants on a regular basis	9 and 10	15	8	8	5

Sexual Practices

In thinking about sexual health for adolescents, two issues are prominent. First, while having sex is not unhealthy in and of itself, early sexual onset has been connected to negative consequences in adulthood including a greater number of recent sexual partners, increased number of recent risky sexual partners, greater history of sexually transmitted infections (STIs) and having sex while intoxicated, and (for males) increased sexual dysfunction (Sandfort, Orr, Hirsch, & Santelli, 2008). Second, adolescents are at relatively high risk for STIs (Weinstein, Berman, & Cates, 2004), which could be greatly lessened through consistent use of condoms.

FIGURE 31
EVER HAD SEXUAL INTERCOURSE

About a quarter of Grade 9-10 students in the rest of Canada and 30% of Grade 9-10 Northwest Territories students report ever having had sexual intercourse. NWT females are somewhat more likely to report having had sexual intercourse than NWT males, while the reverse is true in the rest of Canada.

GRADES 9 AND 10 STUDENTS WHO REPORT HAVING HAD SEXUAL INTERCOURSE, BY GENDER (%)

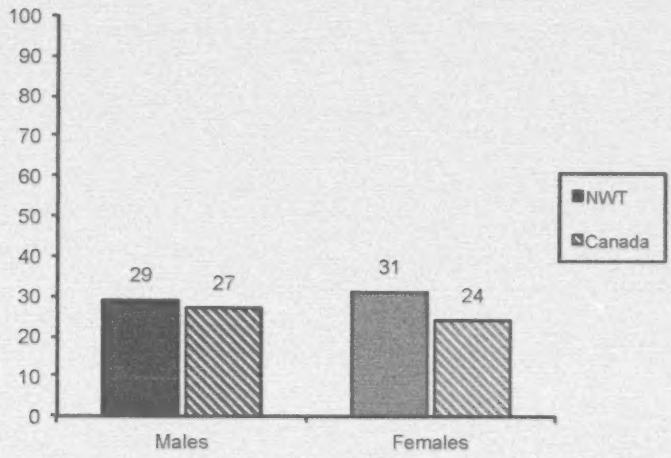
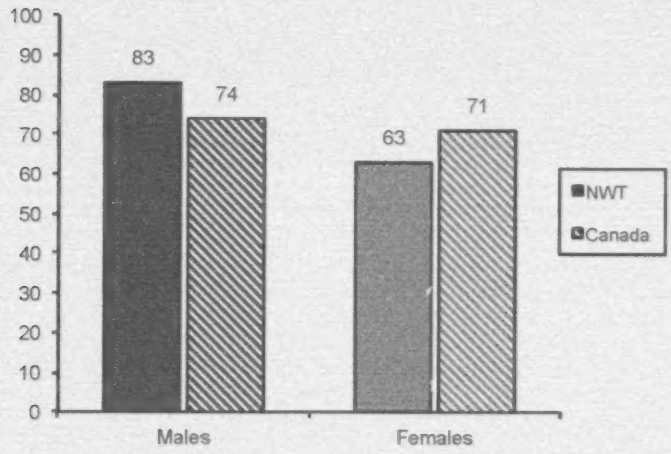


FIGURE 32
CONDOM USE

Reported condom use during sexual intercourse is just over 80% for Northwest Territories males but under 65% for Northwest Territories females. While Northwest Territories males report greater condom use than males in the rest of Canada (7% increase), the reverse is true for females (8% decreases).

GRADES 9 AND 10 STUDENTS WHO REPORT A CONDOM WAS USED THE LAST TIME THEY HAD SEXUAL INTERCOURSE, BY GENDER (%)



Bullying

Bullying puts young people at immediate and long-term risk for many emotional, behavioural, and relationship problems. These risks affect young people who bully others, young people who are victimized, and young people who both bully others and are victimized. Lessons of power and aggression learned through childhood bullying can lead to sexual harassment (McMaster et al., 2002) and dating aggression (Pepler et al., 2008) and may later extend to workplace harassment, and marital, child, and elder abuse perpetrated in other types of relationships. Victimized youth may also carry the hurt and fear from bullying forward into adulthood. Indeed, research on bullying has identified an intergenerational link: parents who bully in childhood are likely to have children who bully their peers (Farrington & Ttofi, 2011).

FIGURE 33
HAVING BEEN BULLIED

For both Northwest Territories and the rest of Canada, more females report having been bullied at school recently than males. Bullying decreases with increasing grades. Thus the lowest group reporting having been bullied is Grade 9-10 males (51% NWT, 54% rest of Canada). The proportions of NWT students indicating they have been victims of bullying are greater than the rest of Canada for Grade 6-8, and similar to the rest of Canada for Grade 9-10.

STUDENTS WHO REPORT HAVING BEEN BULLIED AT SCHOOL IN THE PAST COUPLE OF MONTHS, BY GRADE AND GENDER (%)

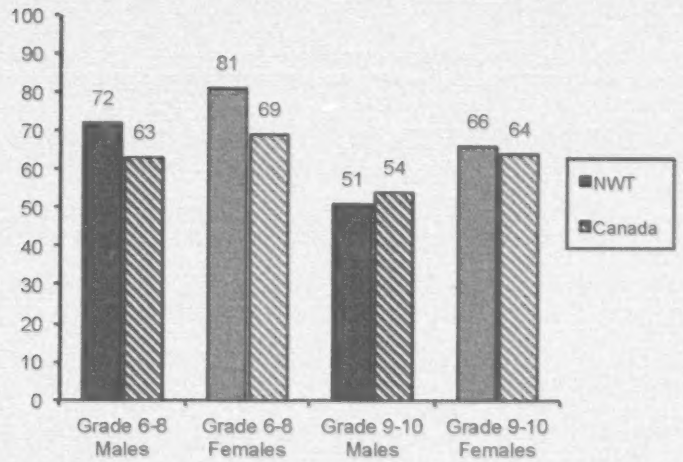


FIGURE 34
BULLYING OTHERS

For both Northwest Territories and the rest of Canada, males report having bullied others more often than do females. While the rates of having bullied others remain fairly static across grades in the rest of Canada, they decrease across grades in Northwest Territories. As a result, Grade 6-8 Northwest Territories students report having bullied others more than Grade 6-8 students in the rest of Canada.

STUDENTS WHO REPORT HAVING BULLIED OTHERS AT SCHOOL IN THE PAST COUPLE OF MONTHS, BY GRADE AND GENDER (%)

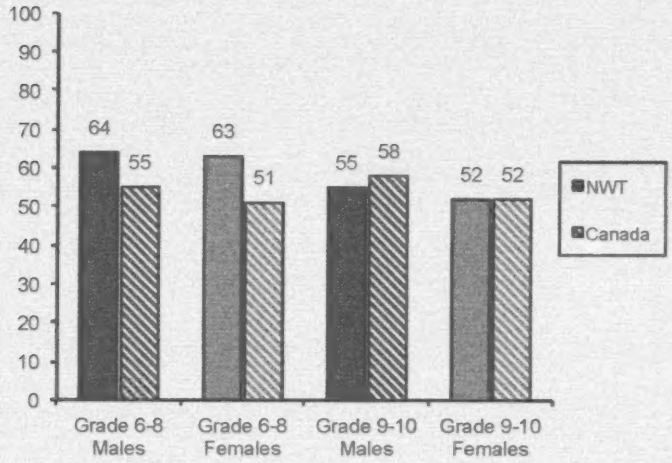


TABLE 4
TYPES OF BULLYING

The most common form of bullying reported by Grade 6-8 students in Northwest Territories is being called mean names/teased hurtfully. While physical bullying and sexual joke bullying are more prominent for NWT males, mean names and being left out are more prominent for NWT females. Exclusion bullying, physical bullying, and electronic bullying are more commonly reported for Grade 6-8 NWT students than students elsewhere.

MOST COMMON TYPES OF BULLYING, BY GRADE AND GENDER (%)

Grades 6 to 8	Males		Females	
	NWT	Canada	NWT	Canada
called mean names, or being made fun of, or teased in a hurtful way.	65	67	70	64
being left out of things on purpose, being excluded from a group of friends, or being completely ignored.	48	40	57	47
being hit, kicked, shoved around, or locked indoors.	48	39	31	21
others told lies or spread false rumours about them and tried to make others dislike them.	47	47	56	55
sexual jokes, comments, or gestures made to them.	41	33	35	34
someone sent mean instant messages, wall postings, emails and text messages, or created a Web site that made fun of me.	17	12	25	18

TABLE 4 continued
TYPES OF BULLYING

While sexual joke bullying is reportedly higher for Grade 6-8 NWT male students than Grade 6-8 NWT female students, it flips in Grades 9-10. Electronic bullying is higher for Grade 6-8 NWT female students than Grade 6-8 NWT male students, and then flips in Grade 9-10, despite both genders decreasing across grades. The differences between Grade 9-10 NWT students and students elsewhere are minimal.

MOST COMMON TYPES OF BULLYING, BY GRADE AND GENDER (%)

Grades 9 and 10	Males		Females	
	NWT	Canada	NWT	Canada
called mean names, or being made fun of, or teased in a hurtful way.	52	65	52	55
being left out of things on purpose, being excluded from a group of friends, or being completely ignored.	39	35	44	39
being hit, kicked, shoved around, or locked indoors.	34	31	17	13
others told lies or spread false rumours about them and tried to make others dislike them.	46	39	59	54
sexual jokes, comments, or gestures made to them.	30	36	43	44
someone sent mean instant messages, wall postings, emails and text messages, or created a Web site that made fun of me.	16	17	14	19

Injuries

Injury is defined as any physical harm to the body caused typically by an external force. The most common causes of injury are physical forces, and in young people these often happen while playing sports, during motor vehicle collisions, while cycling, or during physical fights (Molcho et al., 2006). Injuries can also include poisoning and ingestions, as well as burns. Injury is recognized as a leading health public health issue in populations of young people around the world (Peden et al., 2008). Injuries are costly to society in terms of health care expenditures and time lost from productive activities for both adolescents and adults who care for them when they are injured (Ameratunga, 2009; Leitch, 2007; Peden et al., 2008).

FIGURE 35
INJURIES IN THE PAST 12 MONTHS

In both Northwest Territories and the rest of Canada, more males than females report serious injuries. The numbers are similar between NWT and other parts of Canada.

STUDENTS REPORTING AN INJURY DURING THE PAST 12 MONTHS REQUIRING TREATMENT BY A DOCTOR OR NURSE, BY GRADE AND GENDER (%)

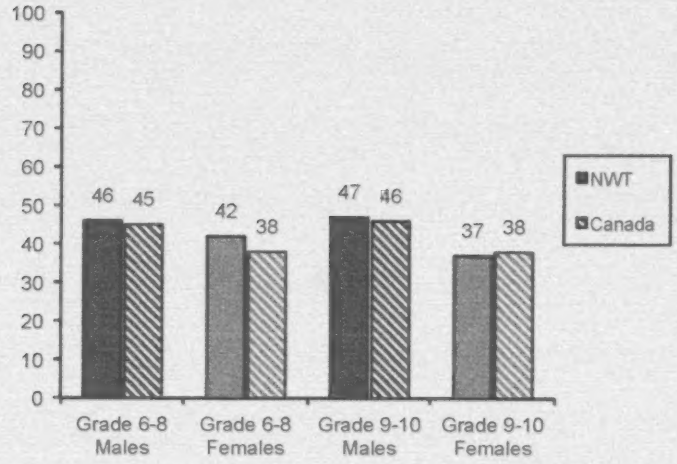


TABLE 5
LOCATION WHERE MOST SERIOUS INJURY OCCURRED

Male students indicate that the most serious injury is most likely to occur at a sports facility or field. For female Grade 6-8 students in the Northwest Territories, a sports facility or field is also the most likely reported; as it is for Grade 9-10 females. However, Grade 6-8 females in the rest of Canada more often report the most serious injury occurring at home or in the yard. Students from the Northwest Territories and the rest of Canada report a decrease across grades for injuries at home/yard and at school during school time.

LOCATIONS OF THE MOST SERIOUS INJURY IN THE PAST 12 MONTHS, BY GRADE AND GENDER (%)

Grades 6 to 8	Males		Females	
	NWT	Canada	NWT	Canada
At home or in the yard	23	24	28	29
At school during school hours	14	16	13	18
At school outside of school hours	4	3	6	5
At a sports facility or field	27	33	30	26
In the street or parking lot	13	7	9	6
Other location	20	17	16	16
Grades 9 and 10				
At home or in the yard	15	16	21	24
At school during school hours	11	13	7	13
At school outside of school hours	6	5	5	5
At a sports facility or field	30	40	32	37
In the street or parking lot	20	9	19	6
Other location	18	17	17	16

Summary/Conclusion

In many respects, students in Northwest Territories show similar patterns to their counterparts in the rest of Canada, so that priorities across Canada, such as ameliorating mental health, reducing bullying, and addressing cannabis use (among others), resonate for policy-makers and practitioners in NWT. However, three areas seem to require special attention for those individuals concerned with the health of adolescents in Northwest Territories: mental health, relationships with others, and obesity/overweight.

Mental Health

For most indicators of mental health, NWT adolescents reported poorer results than adolescents in the rest of Canada. They reported higher emotional problems and fewer prosocial behaviours (both especially true of Grade 6-8 students). As well, the Grade 6-8 students stated they had lower emotional well-being, and the Grade 6-8 females reported more behavioural problems. The Grade 9-10 NWT adolescents indicated their life satisfaction was lower than students elsewhere in Canada.

Relationships with Others

NWT adolescents, compared to other Canadian adolescents, report being less likely to trust people, less likely to see their parents as understanding, more likely to see their parents as expecting too much, and more likely to find it difficult to talk to same-sex friends and, for females only, to opposite-sex friends. When the understanding of relationships is extended to issues around bullying, Grade 6-8 students in Northwest Territories appear to be at a disadvantage. Compared to Grade 6-8 students elsewhere in Canada, Grade 6-8 students in Northwest Territories were more likely to report having bullied and to have been bullied. Three forms of bullying were especially more prominently identified in Northwest Territories for Grade 6-8 students: exclusion, physical bullying, and electronic bullying.

Obesity/Overweight

Using the self-reported BMI as the measure, males and females in the Northwest Territories were more likely to be overweight and obese than other Canadian males and females. However, this difference seems unrelated to food consumption in that NWT adolescents report similar eating patterns as students elsewhere. Indeed, they indicate they eat fewer sweets than students in other Canadian provinces/territories. In addition, their self-reported sedentary behaviours are more positive than students elsewhere in that they report spending less time chatting on-line and about the same amount of time watching television. Grade 9-10 NWT females also indicate they spend less time playing computer games than Grade 9-10 females elsewhere. However, NWT students are less likely to report receiving a minimum of 4 hours weekly of physical activity in school than other Canadian students. The same was true for NWT males outside of school.

In conclusion, there are multiple possible areas for health promotion in the Northwest Territories. Three directions seem most promising: (a) a targeted mental health/bullying prevention program at the Grade 6-8 level, in that Grade 6-8 students report relatively poor mental health and relatively high bullying involvement; (b) more attention to interpersonal relations, particularly with parents and peers; and (c) a greater focus on physical activity, especially at school, with an eye to reducing the numbers of overweight/obese students.

References

Ameratunga, S. (2009). Which pill should we take? *Bulletin of the World Health Organization*, 87: 399.

Benson, P.L. & Scales, P.C. (2009). The definition and preliminary measurement of thriving in adolescence. *Journal of Positive Psychology*, 4:85-104.

Bernard, P., Charafeddine, R., Frohlich, K.L., Daniel, M., Kestens, Y. & Potvin, L. (2007). Health inequalities and place: a theoretical conception of neighbourhood. *Social Science & Medicine*, 65: 1839-1852.

Bowman, S.A., Gortmaker, S.L., et al. (2004). Effects of fast-food consumption on energy intake and diet quality among children in a national household survey. *Pediatrics*, 113(1 Pt 1): 112-118.

Buote, D. (2009). *Social-emotional health in middle childhood: What we know.* Ottawa, ON: Public Health Agency of Canada.

Chassin, L., Pitts, S. & Prost J. (2002). Binge drinking trajectories from adolescence to emerging adulthood in a high-risk sample: Predictors and substance abuse outcomes. *Journal of Consulting and Clinical Psychology*, 70:67-78.

Collin, C. (2006). *Substance abuse and public policy in Canada: V. Alcohol and related harms.* Ottawa, ON: Library of Parliament.

Collins, W.A. & Steinberg, L. (2006). *Adolescent development in interpersonal context.* In: W. Damon & R. M. Lerner, editor. Handbook of Child Psychology. Hoboken, NJ: John Wiley & Sons, p.1003-1067.

Currie, C., Nic Gabhainn, S., Godeau, E., Roberts, C., Smith, R., Currie, D., et al. (eds.) (2008) Inequalities in young people's health: HBSC international report from the 2005/06 Survey. *Health Policy for Children and Adolescents*, No. 5, WHO Regional Office for Europe, Copenhagen, Denmark. Retrieved from: www.euro.who.int/en/what-we-do/health-topics/Life-stages/child-and-adolescent-health/publications2/2011/inequalities-in-young-peoples-health.-hbsc-international-report-from-the-20052006-survey

Elgar, F.J., Knight, J., Worrall, G.J. & Sherman, G. (2003). Behavioural and substance use problems in rural and urban delinquent males. *Canadian Journal of Psychiatry*, 48: 633-636.

Farrington, D. & Ttofi, M. (2011). Bullying as a predictor of offending, violence and later life outcomes. *Criminal Behavior and Mental Health*, 31: 90-98.

Fergus, S. & Zimmerman, M.A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review of Public Health*, 26: 399-419.

Gore, S.A., Foster, J.A., et al. (2003). Television viewing and snacking. *Eating Behaviors*, 4: 399-405.

Green, L.W., Richard, L. & Potvin, L. (1996). Ecological foundations of health promotion. *America Journal of Health Promotion*, 10: 270-81.

Hartup, W. (1993). *Adolescents and their friends.* In: B. Laursen, editor. Close friendships in adolescence: New directions for child development (Vol. 60. San Franscisco, CA: Jossey-Bass, p.3-22.

Janssen, I. & LeBlanc, A.G. (2010). Systematic review of the health benefits of physical activity and fitness in school-aged children and youth. *International Journal of Behavioral Nutrition & Physical Activity*, 7(1):40.

Keyes, C.L.M. (2006). Mental health in adolescence: Is America's youth flourishing? *American Journal of Orthopsychiatry*, 76: 395-402.

King, K., Vadourek, R., Davis, B. & McLellan, W. (2002). Increasing self-esteem and school connectedness through a multi-dimensional mentoring program. *Journal of School Health*, 72(7): 294-299.

Leitch, K. (2007). Reaching for the top: A report by the advisor on healthy children and youth: Ottawa, ON: Ministry of Health Canada.

McMaster, L., Connolly, J., Pepler, D.J. & Craig, W.M. (2002). Peer to peer sexual harassment among early adolescents. *Development and Psychopathology*, 14: 91-105.

Molcho, M., Harel, Y., Pickett, W., et al. The epidemiology of non fatal injuries among 11, 13 and 15 year old youth in 11 Countries: Findings from the 1998 WHO-HBSC cross national survey. *International Journal of Injury Control and Safety Promotion*, 13(4): 205-11.

Nell, V. (2002). Why young men drive dangerously: Implications for injury prevention. *Current Directions in Psychological Science*, 11: 75-79.

Parke, R.D. & Buriel, R. (2006). *Socialization in the family: Ethic and ecological perspectives.* In: W. Damon, & R. M. Lerner, editors. Handbook of Child Psychology. Hoboken, NJ: John Wiley & Sons, p.429-504.

Peden, M., Oyegbite, K., Ozanne-Smith, J., et al. (2008). *World report on child injury prevention.* Geneva, Switzerland: WHO and UNICEF.

Pepler, D., Jiang, D., Craig, W. & Connolly, J. (2008). Developmental trajectories of bullying and associated factors. *Child Development*, 79: 325-338.

Sallis, J.F. & Owen, N. (2002). *Ecological models.* In: K. Glanz FMLBKR, editor. Health behaviour and health education: Theory, research and practice. 3rd ed. San Francisco: Jossey-Bass, p.462-84.

Sandfort, T.G.M., Orr, M., Hirsch, J.S. & Santelli, J. (2008). Long-term correlates of timing of sexual debut: Results from a national US study. *American Journal of Public Health*, 98: 155-161.

Savin-Williams, R.C. & Berndt, T.J. (1990). *Friendship and peer relations.* In:S. S. Feldman & G. R. Elliott, editors. At the threshold: The developing adolescent. Cambridge, MA: Harvard University Press, p.277-307.

Scholte, R.H.J. & Van Aken, M.A.G. (2006). Peer relations in adolescence. In S. Jackson & L. Goossens (Eds.), *Handbook of Adolescent Development* (pp.175-199). New York: Psychology Press.

Squeglia, L.M., Jacobus, J. & Tapert, S.F. (2009). The influence of substance use on adolescent brain development. *Clinical EEG and Neuroscience*, 40: 31-38.

Stewart, D.E. (2008). Implementing mental health promotion in schools: A process evaluation. *International Journal of Mental Health Promotion*, 10(1): 32-41.

Stewart, D.E., Sun, J., Patterson, C., Lemerle, K. & Hardie, M.W. (2004) Promoting and building resilience in primary school communities: Evidence from a comprehensive 'health promoting school' approach. *International Journal of Mental Health Promotion*, 6(3): 26-31.

Tremblay, M.S., Colley, R.C., et al. (2010). Physiological and health implications of a sedentary lifestyle. *Applied Physiology, Nutrition & Metabolism*, 35: 725-740.

Weinstock, H., Berman, S. & Cates, W. (2004). Sexually transmitted diseases among American youth: Incidence and prevalence estimates 2000. *Perspectives on Sexual and Reproductive Health*, 36: 6–10.

Wold, B., Samdal, O., Nutbeam, D. & Kannas, L. (1998). Achieving health and educational goals through schools: A study of the importance of school climate and the students' satisfaction with school. *Health Education Research*, 13: 383-397.

Appendix

Emotional Well-Being Items

- Thinking about the last week ... Have you felt fit and well?
- Thinking about the last week ... Have you felt full of energy?
- Thinking about the last week ... Have you had fun with your friends?
- I have a happy home life.
- I have confidence in myself.

Emotional Problems Items

- Felt depressed or low in last six months.
- Felt nervous in last six months.
- Difficulties getting to sleep last six months.
- I have trouble making decisions.
- I often wish I were someone else.
- I often feel helpless.
- I often feel left out of things.
- I often feel lonely.
- Thinking about the last week ... Have you felt lonely?

Prosocial Behaviour Items

- I often do favours for people without being asked.
- I often lend things to people without being asked.
- I often help people without being asked.
- I often compliment people without being asked.
- I often share things with people without being asked.

Behavioural Problems Items

- I cut classes or skip school.
- I make other people do what I want.
- I talk back to my teachers.
- I get into fights.
- I often say mean things to people to get what I want.
- I take things that are not mine from home, school, or elsewhere.